OCT 08 '92 08:09 UTC 203 [redacted] 6570 P.1

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To Brian Mitchell	No. of Pages 7	Today's Date 10/8/92	Time 8:00 AM
Company USEPA Region VII	From Brian J. Yesh		
Location	Company United Technologies Corp.		
Fax #	Location	Dept. Charge	
Comments	Fax #	Telephone #	
	Original Disposition: ☐ Destroy ☒ Return ☐ Call for pickup		

[redacted] Some information which you may not have. This was put together by Schlegels consultant and submitted (at least) to the IDNR. This information is pertinent to Draft comment #4 of your Draft letter. The wells are adjacent to two of three spill areas.

Attach Document At Line

RECEIVED
OCT 08 1992
IOWA SECTION

SITE CHARACTERIZATION REPORT
SCHLEGEL-KEOKUK FACILITY
KEOKUK, IOWA

Prepared for:

SCHLEGEL CORPORATION
Rochester, New York

Prepared by:

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
St. Louis, Missouri

ESE 590-1143-1000

August 17, 1992

ESE Environmental Science & Engineering, Inc.


A CILCORP Company

3.3 MONITORING WELL INSTALLATION

Borings P-9, P-10, and P-12 were converted into monitoring wells OP-1, OP-2, and OP-3, respectively. The wells were constructed of threaded 2-inch PVC with 10 feet of 0.01-inch slotted screen with 2-inch blank PVC riser. A uniform, rounded sandpack was placed from the bottom of each well to 2 feet above the screen. A 2-foot thick layer of bentonite was placed above the sandpack and hydrated. The boring was grouted to the surface and aboveground, locking protective well casings were installed. A summary of well construction details is provided in Table 3-1. A typical monitoring well construction diagram is presented in Figure 3-2.

Immediately following installation, the wells were developed by bailing with a Teflon bailer for a minimum of five casing volumes until the wells were dry or free of suspended solids.

On May 27, 1992, the location and elevation of each monitoring well was surveyed by ESE and the depth to water and total depth of each well was measured. The wells were then purged with a Teflon bailer for a minimum of three casing volumes. The wells were allowed to equilibrate to 90 percent of their pre-purging level prior to the collection of groundwater samples. The groundwater samples were collected using a Teflon bailer and placed into laboratory supplied glass containers. The samples were labelled and placed immediately on ice for shipment to the ESE St. Louis Analytical Laboratory. Well development and sampling field notes and chain-of-custody forms are included in Appendices C and D, respectively.

Well development and sampling equipment were decontaminated before each use by washing in a Liquinox soap solution and triple rinsing with deionized water. Well development and purge water was containerized for disposal following receipt of laboratory analysis.

3.4 LABORATORY ANALYSIS

Soil samples collected for laboratory analysis were analyzed for extractable petroleum products and related low volatility organic compounds utilizing Iowa Method OA-2. Groundwater samples collected were analyzed for benzene, toluene, ethylbenzene, and

Table 3-1. Summary of Monitoring Well Construction Details

Well Identification	Boring	Total Depth (ft)	Length of Screen (ft)	Top of Casing Elevation
OP-1	P-9	18	10	643.07
OP-2	P-10	20	10	640.65
OP-3	P-12	20	10	643.09

Note: Elevations are in feet above mean sea level.

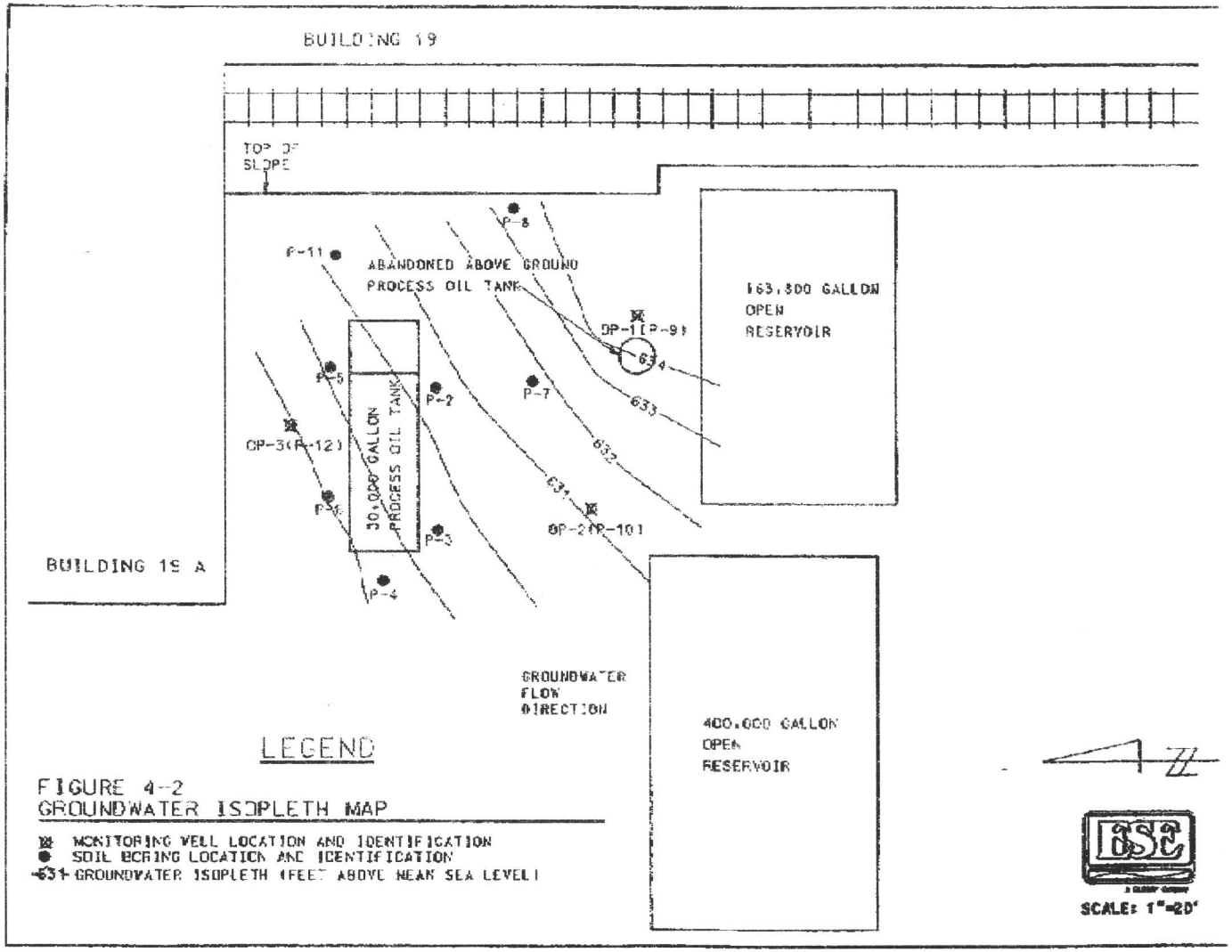
Source: ESE, 1992.

Table 4-2. Groundwater Levels and Elevations Measured on May 27, 1992

Well Identification	Top of Casing Elevation	Depth to Groundwater (ft)	Groundwater Elevation
OP-1	643.07	6.95	636.12
OP-2	640.65	8.57	632.08
OP-3	643.09	14.20	628.89

Note: Elevations are in feet above mean sea level.

Source: ESE, 1992.



Environmental Science & Engineering, Inc.
St. Louis Chemistry Laboratory
11655 Lilburn Park Road
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Analytical Chemistry Results

STATUS: FINAL PAGE# 1

PROJECT NAME: SCHLEGEL-KEOKUK
PROJECT NUMBER: 5922012-0100
SAMPLE MATRIX: WATER
PROJECT MANAGER: JOHN F. GEMOULES

REPORT DATE: 07-02-92
LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA
REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.			OP-1	OP-2	OP-3	DATE	DATE	
LAB I.D.			SCHLEG5*1	SCHLEG5*2	SCHLEG5*3	EXTRACTED	ANALYZED	ANALYS
COLLECTION DATE			05/27/92	05/27/92	05/27/92			
RECEIVED DATE			05/27/92	05/27/92	05/27/92			
PARAMETER	METHOD	UNITS						
POLYNUCLEAR AROMATIC HYDROCARBONS								
ACENAPHTHENE	3510/8270	UG/L	<3.9	<4.2	<4.3	06-09-92	06-26-92	REL
ACENAPHTHYLENE	3510/8270	UG/L	<4.5	<4.8	<5.0	06-09-92	06-26-92	REL
ANTHRACENE	3510/8270	UG/L	<4.6	<5.0	<5.1	06-09-92	06-26-92	REL
BENZO(A)ANTHRACENE	3510/8270	UG/L	<3.6	<3.8	<3.9	06-09-92	06-26-92	REL
BENZO(A)PYRENE	3510/8270	UG/L	<2.9	<3.1	<3.1	06-09-92	06-26-92	REL
BENZO(B)FLUORANTHENE	3510/8270	UG/L	<1.4	<1.5	<1.6	06-09-92	06-26-92	REL
BENZO(GHI)PERYLENE	3510/8270	UG/L	<3.4	<3.7	<3.8	06-09-92	06-26-92	REL
BENZO(K)FLUORANTHENE	3510/8270	UG/L	<4.5	<4.8	<5.0	06-09-92	06-26-92	REL
CHRYSENE	3510/8270	UG/L	<1.7	<1.9	<1.9	06-09-92	06-26-92	REL
DIBENZO(A,H)ANTHRACENE	3510/8270	UG/L	<3.3	<3.5	<3.6	06-09-92	06-26-92	REL
FLUORANTHENE	3510/8270	UG/L	<2.4	<2.6	<2.6	06-09-92	06-26-92	REL
FLUORENE	3510/8270	UG/L	<5.9	<6.3	<6.5	06-09-92	06-26-92	REL
INDENO(1,2,3-CD)PYRENE	3510/8270	UG/L	<3.5	<3.7	<3.8	06-09-92	06-26-92	REL
NAPHTHALENE	3510/8270	UG/L	<3.3	<3.5	<3.6	06-09-92	06-26-92	REL
PHENANTHRENE	3510/8270	UG/L	<4.0	<4.3	<4.4	06-09-92	06-26-92	REL
PYRENE	3510/8270	UG/L	<1.2	<1.2	<1.3	06-09-92	06-26-92	REL
VOLATILE PETROLEUM COMPOUNDS	(BT(E)X)							
BENZENE	5030/8020	UG/L	<0.11	0.30	<0.11		06-02-92	SJM
ETHYLBENZENE	5030/8020	UG/L	<0.16	0.24	<0.16		06-02-92	SJM
M/P-XYLENES	5030/8020	UG/L	<0.13	0.97	0.45		06-02-92	SJM

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Analytical Chemistry Results

STATUS: FINAL PAGE# 2

PROJECT NAME: SCHLEGEL-KEOKUK
PROJECT NUMBER: 5922012-0100
SAMPLE MATRIX: WATER
PROJECT MANAGER: JOHN F. GEMOULES

REPORT DATE: 07-02-92
LAB MANAGER/QC REVIEW: JEFFREY N. SIRIA
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SAMPLE I.D.			OP-1	OP-2	OP-3	DATE	DATE	
LAB I.D.			SCHLEG5*1	SCHLEG5*2	SCHLEG5*3	EXTRACTED	ANALYZED	ANALY:
COLLECTION DATE			05/27/92	05/27/92	05/27/92			
RECEIVED DATE			05/27/92	05/27/92	05/27/92			
PARAMETER	METHOD	UNITS						
O-XYLENE	5030/8020	UG/L	<0.12	0.37	0.15		06-02-92	SJM
TOLUENE	5030/8020	UG/L	<0.17	0.29	0.35		06-02-92	SJM